

THERMAL TUNING OF A LASER USING DOPED SILICON ETALON

ABSTRACT OF THE DISCLOSURE

[0059] In embodiments of the invention, a wavelength-selective device is doped with n-type or p-type material to make the single-crystal silicon in the active region of the device electrically conductive. An electrically conductive and thermally conductive active region allows an external heater such as a platinum heater strip to be eliminated and current to be applied directly to the single-crystal silicon to thermally tune the laser.